

## SLIDE DELETED



## "At the Edge"







### "Establishing the links"







## "The next level up"

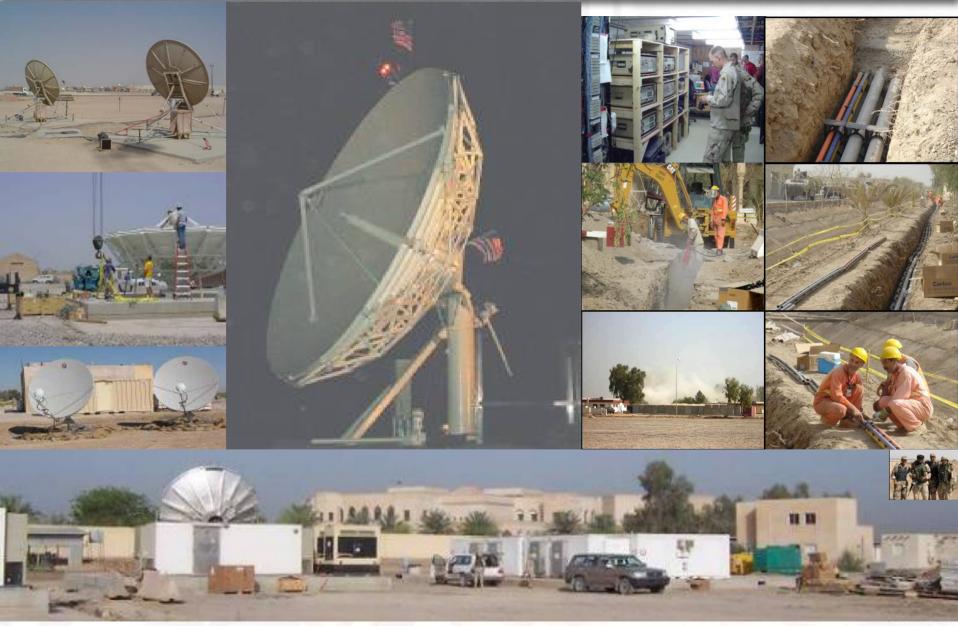






#### "Building the infrastructure in country"







## "Around the World"







### "Posts, Camps and Stations"





## SLIDE DELETED

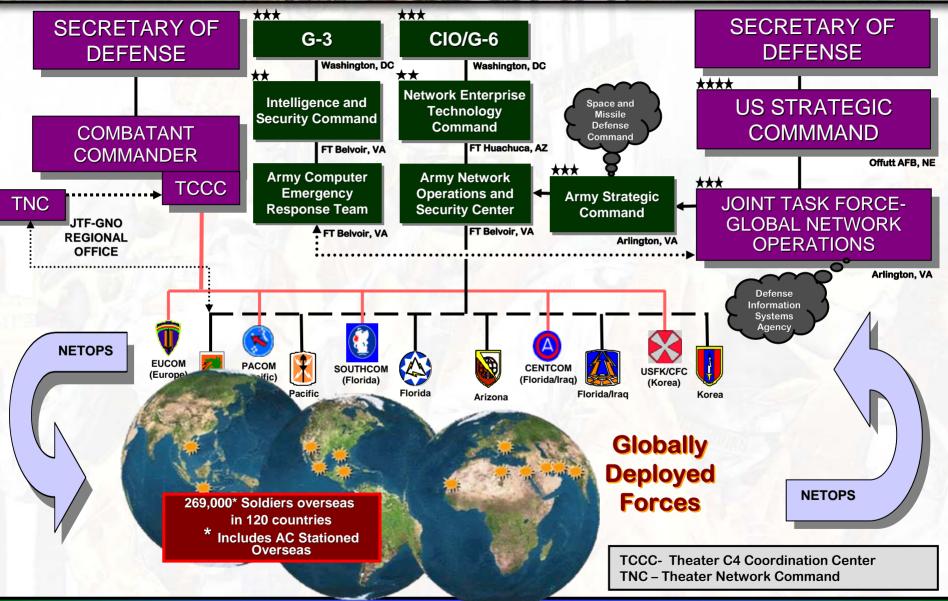
## SLIDE DELETED



#### **Network Operations (NETOPS)**



(System & Network Management; Information Assurance; Information Dissemination)

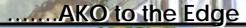




#### AKO - A Global Perspective

**AKO Prime** 







- Universal E-mail
- Instant Messaging
- Secure Architecture
- Single Sign-On
- SIPR/NIPR
- AKO-Lite
- Collaboration
- Search
- Upgrade E-Mail
- .....AKO-Forward



**Individual Soldier Usage Month of October 2005** 



77%





**78%** 

**74%** 

























- .....Collaboration







- Completed
- Availability = 99%



AKO-S







•Usage: 54%

•Enrolled: 94%

**Finance** "My Pay"

Personnel "Mv Personnel"

**AKO** 

Secondary

Site (DR)

Operations "My Training"

Logistics **CSSCS** 

Intelligence **Intel Portals** 

**Allotments** TDY LES

**Assignments** Records **Photos** 

**Planning SRS** 

LOGMOD **E-Commerce Army Flow Model** 

**Analysis** Reports Warnings

Web based applications accessed through AKO



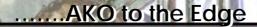
#### AKO - A Global Perspective



Resourced Since 9-11

Europe,

AKO-S





- Instant Messaging
- Secure Architecture
- Single Sign-On
- SIPR/NIPR
- AKO-Lite
- Collaboration
- Search
- Upgrade E-Mail
- .....AKO-Forward
- .....Collaboration

AKO

Korea.



Hawai



Soldiers, spouses, family members and all members of the Army Family who need assistance because of Hurricane Katrina should email the Well-Being Liaison Office at KATRINA.RELIEF@US.ARMY.MIL, or call them at 1-



Rising floodwaters swallow parked cars on Keesler Air Force Base, Miss., Aug. 29, 2005, as Hurricane Katrina hits the region. The base is home to 6,000 military students, permanent party, civilians and their families. The initial damage to base infrastructure was catastrophic: the base is currently in the assessment and recovery stage, Department of Defense photo-

In the wake of the disaster caused by Hurricane Katrina, the U.S. Army is working in conjunction with the other Armed Services, Federal Agencies, and state and local agencies to rush repairs, help, comfort and security to the ravaged communites. This site serves as a one-stop point for information, help resources and current news about the recovery

Airmen deploy in support of hurricane relief AKO-

EMERGENCY CONTACT NUMBERS FOR SERVICE

ARMY NATIONAL GUARD HELPLINE: 1-888-777-7731

Families of Deployed Army National Guard Soldiers affected by Hurricane Katrina can call the number above and identify vourselves so that we may inform deployed Guardsmen of

MILITARY ONE SUPPORT NUMBER: 1-800-342-9647

Any military members or families in need of counseling services may call the Military One Support number above

KEESLER AIR FORCE BASE TELEPHONE HELPLINE: 1-800-435-9941

NAVY TELEPHONE HELPLINE: 1-877-414-5358

This line will be staffed 24 hours by active duty Navy volunteers and will have connectivity with Navy, FEMA and other government agencies. They will try their very best to answer questions regarding the status of Navy family members, but please be aware that communication in the

The White House

The Federal Emergency Management Agency

The Red Cross Disaster Help.gov

RECUIUS LES **Photos** 

--> Detailed list of additional resources

**Army Flow Model** 

LOGMOD **E-Commerce** 

Logistics

**CSSCS** 

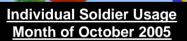
**Analysis** Reports Warnings

Intelligence

**Intel Portals** 

•Enrolled: 94%

Web based applications accessed through AKO







AKO-S





78%

74%



















#### **Award Winning Portal**



" If there's one thing the 2001 InfoWorld organizations have in common, it's bolstering their efforts through e-business technologies, whether it's to streamline processes, enhance customer service, or develop new ways to drive revenue. Each of these organizations exemplifies the ways in which cutting-edge technologies can be used to build better businesses."

- 1. J.P. Morgan Chase
- 2. Proctor & Gamble
- 3. Fannie Mae
- 4. Sears, Roebuck & Co.
- 6. Reuters
- 7. United Parcel Service of America
- 9. Dow Chemical

#### 10. United States Army

- 13. Starbucks
- 23. Nordstrom
- 27. Yahoo
- 36. NASDAQ
- 52. Merrill Lynch
- 55. Carnegie Mellon
- 60. Genera Motors

67. **Shay** 

- April 2003 -

Excellence Award for internal portal

category

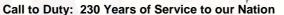


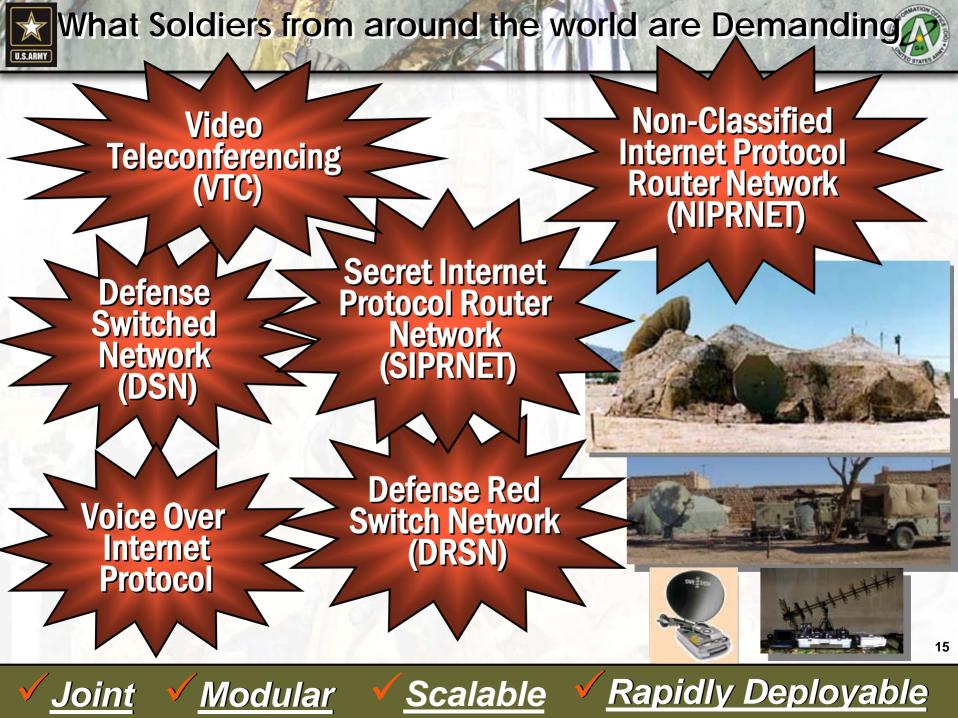
HONOREE 2005



WebBusiness 50

\*InfoWorld Magazine, November 2001, Top 100 List







### Moving to "Everything over IP (EoIP)"



- FIRST... the Joint Special Operations
  Command Fort Bragg
- THEN .... the Joint Communications
  Support Element MacDill AFB
  - Iraq
  - Afghanistan



• EoIP

- Scalable
- Flexible
- Efficient
- Less cost, smaller footprint, less people.
- EoIP will converge & reduce training requirements

**Current Circuit Based & Telephony Capability** 



Everything Over IP (EOIP) Refit



Video Unclassified Networks

#### **JOINT COMMUNICATIONS SUPPORT ELEMENT**



























#### **Army Networks**



#### Commercial Technology Inside





### **Army Networks**



#### Commercial Technology Inside



Public Network Carriers





#### Digital Global Insurgents

#### Anonymous



Ubiquitous

**Pervasive** 

In the snow-draped mountains near Jalalabad in November 2001, as the Taliban collapsed and al Qaeda lost its Afghan sanctuary, Osama bin Laden biographer Hamid Mir watched "every second al Qaeda member carrying a laptop computer along with a Kalashnikov" as they prepared to scatter into hiding and exile.\*\*

an al Qaeda operative "no longer has to carry anything that's incriminating. He doesn't need his schematics, he doesn't need his blueprints, he doesn't need formulas." Everything is posted on the Web or "can be sent ahead by encrypted Internet, and it gets lost in the billions of messages that are out there."\*\*

**Terrorist-related Web sites\*\*** 

- 1997 **=** 12
- 2005 > 4,500

al Qaeda - the <u>first guerrilla movement</u> <u>in history to migrate from physical</u> <u>space to cyberspace</u>

- suicide bombers & ambush units in Iraq access the Web for training and tactical support
- massive and dynamic online library of training materials -- some supported by experts who answer questions on message boards or in chat rooms -
  - mix ricin poison,
  - make a bomb from commercial chemicals,
  - pose as a fisherman and sneak through Syria into Iraq,
  - shoot at a U.S. soldier,
  - navigate by the stars while running through a night-shrouded desert. \*\*

## SLIDE DELETED



#### **Neglecting Cyber Defense Is Costly**





I Love You Virus - Analysts estimate damages worldwide as high as \$10 billion.

"Mafiaboy", a 16-year-old from Montreal, COM.com Quebec, faced 66 charges for Distributed **Denial of Service attacks causing losses in** the hundreds of millions. VAHOO!









Costs for rebuilding the infrastructure of poorly secured Army posts camps and stations in the millions of \$\$\$\$\$



## IA Vulnerability Management (IAVM) Tools to Automate the Process

#### Find, Fix, Report, and Verify Compliance!



**Report:** Army Asset & Vulnerability **Tracking Resource** (AVTR)

> **Train:** Schoolhouse, eLearning, Virtual On-Demand

**Verify:** Army Compliance Verification Teams (CVT) conduct random/directed inspections



# Reshaping our Testing and Training..... Investing in Soldiers, equipment & infrastructure







#### One Team - One Effort



## **Soldiers**





## Givilians



**Trainers** 







**Network Engineers** 



#### **Technicians**



~50000 contractors in SWA



#### Take Away's



- The Army system (LandWarNet)...
  - ..is Diverse business to combat
  - ..stretches Worldwide
  - .. operates in multiple environments combat zone to office
  - .. confederation of networks
- Our ~1 Million users operate worldwide spanning the globe...
  - ..peacekeeping - humanitarian assistance - combat operations
  - ...combat zone to office
- Maintain and operate a "global" network infrastructure
  - ..IP end to end!! Everything over IP
  - .. Foxhole to factory business and operational context
  - ..terrestrial, non-terrestrial, tactical, commercial, fiber, radios
  - .. One Army, One CIO Active Duty, National Guard, Army Reserve
- Maintain and operate one of the largest corporate intranets in the world
  - ..~1.8M users soldiers, family, civilians, contractors
  - ..access worldwide anywhere anytime
  - ..Not just business/administrative supports operations worldwide
- Major challenge secure the infrastructure
  - ..under all conditions end to end
  - ..Enterprise licensing IA architecture
  - ..changing the culture
- One Team We don't do it alone
  - ..industry is a key player



